

PRELIMINARY EXAMINATION OF LITTLE WABASH RIVER,
ILLINOIS.

L E T T E R

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

With letter of the Chief of Engineers, report of a preliminary examination of Little Wabash River, Illinois.

JANUARY 7, 1893.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington, January 6, 1893.

SIR: I have the honor to inclose herewith a letter from the Chief of Engineers, dated January 5, 1893, together with a copy of a report from Lieut. Col. G. J. Lydecker, Corps of Engineers, dated December 22, 1892, of a preliminary examination made by him in compliance with the provisions of the river and harbor act of July 13, 1892, of Little Wabash River, Illinois.

Very respectfully,

S. B. ELKINS,
Secretary of War.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 5, 1893.

SIR: I have the honor to submit the accompanying copy of report, dated December 22, 1892, by Lieut. Col. G. J. Lydecker, Corps of Engineers, of the results of a preliminary examination of Little Wabash River, Illinois, made to comply with provisions of the river and harbor act approved July 13, 1892.

It is the opinion of Lieut. Col. Lydecker, concurred in by this office, that the river is not at this time worthy of improvement by the General Government.

Very respectfully, your obedient servant,

THOS. LINCOLN CASEY,
Brig. Gen., Chief of Engineers,

Hon. S. B. ELKINS,
Secretary of War.

PRELIMINARY EXAMINATION OF LITTLE WABASH RIVER, ILLINOIS.

UNITED STATES ENGINEER OFFICE,
Louisville, Ky., December 22, 1892.

GENERAL: I have the honor to submit the following report on a preliminary examination of the Little Wabash River, Illinois, made pursuant to instructions contained in Department letter of July 14, 1892.

This river, taking its rise in Shelby County, Ill., flows in a southerly direction, and empties into the Wabash River at a point about 50 miles above its mouth. Its total length is about 250 miles.

It is reported that in the year 1836 the State of Illinois declared this a navigable stream for a distance of about 180 miles from its mouth, and that its improvement was subsequently undertaken by the State, an appropriation of \$35,000 having been made as late as 1868 to complete the construction of a lock and dam at New Haven, 2 miles above the mouth of the river. This work was duly completed in the following year, but it appears that the lock was kept in operation for about one year only; a few years later a portion of the dam was destroyed by fire, said to have been incendiary, and finally, in 1886, the dam was removed under a State appropriation.

The recent examination was confined to that portion of the river below the town of Carmi, about 26 miles above its mouth, at which point a milldam constitutes a complete obstruction to navigation; between this point and the mouth, 26 miles distant, the river is crossed by a wagon bridge without draw. The examination was made at extreme low water, such that it was not deemed advisable to attempt the trip in a rowboat; the stream was found to be shallow and sluggish, with occasional deep pools, a flow of about 35 feet per second, and a fall of 11 feet in 24 miles; the width is about 300 feet between banks and the latter are generally high. Since 1870 there has been practically no commerce on the river, except that when the Wabash River is at a navigable stage boats ascend the Little Wabash about 2 miles to New Haven, and carry away the grain stored in that vicinity; the amount thus shipped during the past two years is reported to have been 135,000 bushels in 1890 and 120,000 bushels in 1891. Additional statistics as to the probable amount of commerce that might follow the improvement of the river were promised at the time of the examination by interested parties, but none have as yet been received, though several communications have since been sent to such parties asking that the promised information be furnished.

The above facts are summarized from the report of O. L. Petitdidier, assistant engineer, who made the examination, and whose report thereon is transmitted herewith, together with a blue-print sketch* of the stream from Carmi to the mouth.

After careful consideration of the facts presented I am of the opinion that the river is *not*, at this time, worthy of improvement by the General Government. Navigation on the main Wabash River, in its present condition very uncertain. When this is navigable boats can also ascend the Little Wabash as far as they would be likely to go to take on freight. It is probable that if the river were, at such times, navigable all the way up to Carmi, local freight rates might be slightly affected for the time being, but the takings of the railroads would leave an insignificant amount for river commerce. If, however, the contemplated improvement of the Lower Wabash should result in the establishment

* Not printed.

of any considerable *regular* traffic on that stream, the improvement of the Little Wabash in such way as to permit the extension of such regular traffic up to Carmi might then become a worthy undertaking by the General Government.

Very respectfully, your obedient servant,

G. J. LYDECKER,
Lieut. Col., Corps of Engineers.

Brig. Gen. THOMAS L. CASEY,
Chief of Engineers, U. S. A.

REPORT OF MR. O. L. PETITDIDIER, ASSISTANT ENGINEER.

MT. CARMEL, ILL., *November 25, 1892.*

COLONEL: I have the honor to present the following report on a preliminary examination of the Little Wabash River, Illinois, made on October 27, 28, and 29, 1892: In compliance with your instructions, I proceeded on October 27, 1892, to Carmi, Ill., which town is located on the banks of the Little Wabash River about 26 miles from its mouth.

The Little Wabash River takes its rise in Shelby County, passing through Effingham, Clay, Wayne, and White counties, and empties into the Wabash River at a point 15 miles distant from its junction with the Ohio River, the total length of the Little Wabash River being about 250 miles. This stream was, in the early days, of some importance as an artery of commerce, and as early as the year 1836 the legislature of the State of Illinois declared the Little Wabash a navigable stream up to the northern boundary line of Clay County (this being about 180 miles from the mouth of river).

No definite account of commerce done in the early days could be obtained, but there was evidently a demand for improvement, as, in the year 1868, an appropriation of \$35,000 was granted by the State of Illinois to continue and complete the construction of a lock and dam which had been begun by a private corporation at New Haven, 2 miles from the mouth of the river.

This lock and dam were completed in 1869 and in use for one year, when, through some defect in the construction of the gates, these could no longer be opened, and navigation became suspended, the dam having thus become a complete barrier. This state of affairs lasted a few years, when a portion of the dam was destroyed by fire, it being evidently a case of incendiarism.

This gave some relief to the navigation, but not completely, so that in the year 1886 the Illinois State legislature passed an appropriation for the removal of dam, which was now useless and in the way.

Some 80 linear feet of the dam were removed in 1887, when the appropriation became exhausted. Such is, in brief, the history of the navigation on the Little Wabash River.

As a mill dam is good order and of considerable importance was known to be in existence at Carmi, and as this dam is impassable to navigation, except at the highest stages of water, it was deemed unnecessary to make an examination of the Little Wabash River above Carmi. This report will, therefore, be confined to the portion of river between this point and the mouth of the river.

It had been my intention to examine the river in detail between Carmi and the mouth, by means of a row boat, but the stage of water, which was then at its lowest, did not allow of it without entailing more time and expense than the funds allotted for the examination would warrant, so that this project was abandoned and I confined myself to examining the river at Carmi and thence by buggy to New Haven, 2 miles from mouth of river, stopping to take observations of the river whenever near enough to it.

At New Haven, where the old lock and dam are located, a thorough examination was made.

Starting at Carmi, about 26 miles from the mouth, I found a mill dam, in good state of repair, clear across the river. This dam, with a lift of 10 feet, is built to produce a pool above Carmi, which supplies several sawmills with logs and which also supplies a 100-barrel flour mill with water power for nine months of the year.

This dam is said to be over 50 years old. It has been rebuilt several times.

From Carmi down to the mouth the river, at low water, is usually shallow and sluggish, with here and there long, deep pools. The flow at time of examination did not exceed 30 to 35 cubic feet per second, while the fall between Carmi and New Haven, a distance of about 24 miles, is only 11 feet.

The banks of the river were found to be usually high and overflowed only at high-est water.

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The width of river between banks is 300 feet at Carmi, and this remains tolerably constant thence to the mouth.

Two bridges at Carmi and a third bridge 3 miles below complete the list of obstructions found until New Haven was reached.

At New Haven were found the ruins of the old lock and dam, photographs of which accompany this report.

As mentioned in the early portion of this report, the lock and dam were completed in 1869.

I was still able to ascertain the following dimensions of the former work, lock and dam being built on a foundation of sandstone rock: Dam, 24 feet wide, 17 feet high, with lift of 14 feet; lock chamber, 150 feet long between miter sills and 36 feet wide.

The lock and dam were both built of timbers framed in such a manner as to form internal compartments, which were filled with stone.

Some 17 acres of land abutting the lock are still owned by the State of Illinois.

When the dam was in working order the water was backed up a little over 2 feet deep at foot of milldam at Carmi, thus insuring at all times unimpeded navigation to the Wabash River, provided lock had been in good order.

Commerce.—There has been but little commerce done on the river since 1870, not only owing to the uselessness of the dam, but also owing to railroad competition.

The only commerce done at present is at and within a short distance of New Haven, where steamboats come every winter from the Wabash River and carry away the grain stored and waiting for transportation.

The amount of commerce reported as done by the principal shipper at New Haven is as follows:

| | |
|--------------------------------|----------|
| Amount carried by river, 1890: | Bushels. |
| Wheat..... | 80, 000 |
| Corn..... | 55, 000 |
| Amount carried by river, 1891: | |
| Wheat..... | 55, 000 |
| Corn..... | 65, 000 |

1892, in storage, 45,000 bushels wheat. Corn not yet gathered.

This is only a percentage of what might be done, as the surrounding country is most fertile and the area under cultivation is increasing rapidly.

Many additional statistics of the amount of commerce done at Carmi which might be carried by the river route were promised but have so far not been received.

It is an undoubted fact, however, of which I was well assured by the many business men interviewed at Carmi, that better shipping rates could be obtained from the two railroads at this place for the 250,000 bushels of grain shipped yearly were there a river outlet as an alternative.

Conclusion.—In conclusion, I would give it as my opinion that the Little Wabash River is worthy of improvement by the General Government, for the following reasons:

(1) The commerce done under the present unfavorable conditions is not inconsiderable, and this would after improvement be much increased.

(2) There is a very general desire to see the improvement done.

(3) From an engineering standpoint the conditions of successful permanent improvement are very favorable.

(4) The possibility of improvement is beyond question, the experiment having been successful, barring the faulty location and construction of details of lock.

The following objections against the improvement have some weight:

(1) It is probable that were the dam rebuilt some of the lowlands adjoining the river would be submerged, and the question of indemnity might be a serious one.

(2) The possible insalubrity due to stagnant water.

(3) Presence of a wagon bridge below Carmi, which would require to be provided with a draw.

But the full force of these and other minor objections could only be ascertained through a survey, whereby the question of improvement can be discussed with a fuller knowledge than can be acquired by a first examination. Then can an approximate estimate of the total cost of improvement be made.

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Very respectfully submitted,

Your obedient servant,

O. L. PETITDIDIER,
Assistant Engineer.

Lieut. Col. G. J. LYDECKER,
Corps of Engineers.